



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of: **OHMI, et al.**

Group Art Unit: **3753**

Serial No.: **09/023,416**

Examiner: **Fox, John C.**

Filed: **February 13, 1998**

P.T.O. Confirmation No.: **6923**

For: **FLUID CONTROL APPARATUS**

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TECHNOLOGY CENTER R3700

RESPONSE

Commissioner for Patents
Washington, D.C. 20231

March 6, 2003

Sir:

In response to the Office Action dated **December 3, 2002**, extended to **April 3, 2003** by a **One** month Petition for Extension of Time, the Examiner is respectfully requested to reconsider the rejection given in the Office Action of claim 1 under 35 U.S.C. §102(b) as being anticipated by the newly cited patent to Kumada.

The present invention has been explained at length in the description of the invention contained in the application as originally filed. Moreover, as particularly described in the Appeal Brief filed in the Appeal against the final rejection of claim 1 given in the previous Office Action, the claimed invention includes a fluid controller 3, and inlet and outlet on-off devices 6 to 7 and 8 to 10, respectively, which are arranged on the respective inlet and outlet sides of the fluid controller 3. The on-off devices in various selected arrangements may comprise one valve or a plurality of valves in which adjacent valves interconnect with each other. The invention contemplates that, in the construction of the various arrangements, each of the on-off devices are one of five kinds; that the main bodies of the valves are identical; that the ports of the respective valve main bodies are all

aligned in a row; and that connections between adjacent valve main bodies are made by substantially identically formed joint members which contain internal passages instead of external tubing.

As a result of practice of the claimed invention, fluid control apparatus of compact size are produced as compared with comparable prior art devices that employ external tubing. For example, by use of the disclosed on-off devices, as compared with prior art equipment, reductions of 61% longitudinally, 42% horizontally and 26% area-wise are achieved. Moreover, improved inventory due to a reduction in the required number of parts obtained via standardization of component design is achieved as a result of there being required with any of the concerned five types of on-off devices, valve main bodies of only two configurations, a two-port configuration and a three-port configuration.

The following specific limitations in claim 1 are not described in the Kumada patent which is relied upon in the rejection:

a) "each of the on-off devices being of the type selected from the group including a 2-type on-off device having a two port valve, a 2-3 type on off device having a two-port valve and a three-port valve, a 2-3-3 type on-off devices having two-port valve and two three port valves, a 3-3-type on-off device having two three-port valves, and a 3-3-3-type on-off device having three three-port valves," (lines 6 to 10);

b) "main bodies of two-port valves of all types of on-off devices being identical in configuration and each having an inlet port and an outlet port in a bottom face thereof, and main bodies of three-port valves of all types of on-off devices being identical in configuration and each being formed in the bottom face thereof with an inlet port, an outlet port always in connection with

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the inlet port, and an inlet-outlet port subopening having a port separate from said inlet port and said outlet port,” (lines 11 to 16);

c) “each port of said two-port valves and said three-port valves being arranged in a row disposed in a common plane along said each line,” (lines 17 and 18); and

d) “valve mounts mounting said valve main bodies including a plurality of joint members having ... a channel for holding the adjacent inlet port and outlet port of adjacent valves in connection,” (lines 19-21).

As to limitation a), the Kumada reference fails to contemplate use of an on-off device which is one selected from a group consisting of the recited five kinds of valves. As to limitation b), the Kumada reference, instead of showing the bodies of all two-port valves being identically formed and the main bodies of all three port valves being identically formed, shows the plurality of valve structures containing a single, integrated valve body. As to limitation c), there are no two-port valves, as such, in the disclosed gas supply arrangement. Finally, as to limitation d), instead of separate valve mounts, the valve mount disclosed by Kumada for use with adjacent valves is an integrally formed valve mount, as identified in the drawings at 41, and not “a plurality of joint members” as required by the claim.

Importantly, it is finally submitted that, instead of there being joint members having internal passages interconnecting adjacent valves as in the claimed invention, in Kumada the interconnections are defined by exposed tubes (see tubes 45-1, 45-2, 45-3 and 45-4 in the patent drawings). Therefore, the reference shows the very form of construction sought to be eliminated by the invention.

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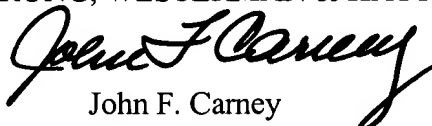
For the foregoing reasons, therefore, it is submitted that claim 1 in the application distinguishes over the apparatus disclosed in the Kumada reference. The claim is thus submitted as being patentable so that allowance of the claim is respectfully solicited.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees, which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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